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May 5, 2005

TO: Mr. Russell Hart, RPM
United States Environmental Protection Agency
Region V
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

FROM: Mr. David Curnock, PM, SECOR International Incorporated DMC FOR

RE: MONTHLY PROGRESS REPORT/MEMORANDUM
Area 9/10 Remedial Design
Southeast Rockford Groundwater Contamination Superfund Site
Rockford, Illinois

Copies: Mr. Thomas Turner, Regional Counsel, USEPA Region V
Mr. Scott Moyer, Hamilton Sundstrand/United Technologies Corporation
Ms. Kathleen McFadden, United Technologies Corporation
Mr. Thomas Williams, PM, IEPA
Mr. Terry Ayers, IEPA

CURRENT MONTH PROJECT ISSUES/STATUS: (*activities, meetings, deliverables, etc.)*
Activities conducted in April 2005 consisted of the continuation of Pre-Design Investigation and initial design activities. Based on recent discussions with USEPA, IEPA, and SECOR, there are two areas of focus at this time with respect to the Remedial Design activities. These two focus areas consist of the former RCRA Outside Container Storage Area (OSA) and the area beneath the Hamilton Sundstrand (HS) Plant #1, up-gradient of the additional monitoring wells installed in the western portion of the South Alley.

The analytical data collected from samples from the OSA during the Pre-Design Investigation and pilot studies has been evaluated and based on this evaluation a work plan for source mass reduction by the removal of near surface soils has been prepared and submitted to the USEPA and IEPA. The work plan provides an analysis of the data, the rationale for the source removal effort, and a description of the planned activities. The work plan was submitted in April.

The second area of focus is an area located beneath the HS facility that has been identified as a location of potential source material based on down-gradient groundwater monitoring results. With access to the inside of the building being unavailable, alternative means have been explored and evaluated and horizontal drilling appears to be the most effective method of infrastructure installation. All pertinent site data is being evaluated to identify the optimal number and placement of horizontal wells. The most likely location of the potential source material is associated with the former area of underground storage tanks (USTs) located in the central portion of the plant south of the loading dock area.

Horizontal drilling techniques will likely provide the best means of well placement beneath the building. While being able to access the target area, there are some limitations and

constraints posed by this drilling technique. Several challenges associated with horizontal drilling include: 1) discrete soil sampling is not possible; 2) the off-set distances necessary to get to the target depth for well installation require access to adjacent property to the south and the Illinois Central Railroad easement north of the Hamilton Sundstrand facility; and 3) high cost per well. However, it does provide the mechanism for the design of a remedial system utilizing the Record of Decision (ROD) prescribed technologies of soil vapor extraction (SVE) and enhanced air-sparging (AS) for Area 9/10.

As no source area had been defined prior to the performance of the Pre-Design Investigation SVE and AS pilot testing was performed at the OSA. Based on the location of the potential source area underneath the operating facility building, a second pilot test is being considered. This pilot test will provide critical design data for equipment selection (blowers and air treatment) based on wells with horizontal orientation and longer well screens based on location specific flow rates, radius of influence observed, and constituent of concern loading observed during the pilot test.

FUTURE PROJECT ISSUES/STATUS: *(activities, meetings, deliverables, etc.)*
Future project activities for May 2005 will include continuation of monitoring and evaluation of LNAPL (JP-4) presence and recovery at the eastern end of the South Alley.

A brief memo is being prepared which outlines the conceptual horizontal SVE and AS well installation, well alignment, and pilot testing activities. After internal review, the memo will be submitted to the USEPA and IEPA. The target date for the submittal of this memo to USEPA and IEPA is the end of May. Alternative contaminant source identification and access means will continue to be evaluated. Additional discussions, both internally and with the USEPA and IEPA, are anticipated with respect to horizontal drilling and additional pilot testing prior to preparation of a final design. One topic of these discussions will be the required set back distances and off-site access for horizontal drilling. This issue has the potential to affect the overall design and constructability of a system. Currently there is a presumption of reasonable access to the off-site property(s). However, the DRB property to the south is for sale which could affect current and future access. Utility clearance (even with horizontal drilling) could also be an issue. Therefore, local utility companies will be contacted to verify locations and approve of the techniques and potential subsurface crossings. There is also the potential when drilling on the property of others that previously unknown contamination may be encountered.

The work plan for source mass reduction (excavation) of near surface soil in the OSA was submitted to USEPA and IEPA in April. Assuming that there are no significant changes to the scope of work, it is anticipated that this effort will be approved for implementation for late Spring/early Summer 2005.

SAMPLE/TEST DATA SUBMITTALS:
No submittals are included with this memorandum. A work plan for source mass reduction at the OSA was submitted under separate cover for agency review and approval in April.

RD SCHEDULE UPDATE: (*attach updated schedule as necessary*)
As the activities associated with the Pre-Design Investigation portion of the Remedial Design (RD) continue, the overall schedule continues to be revised. A scope of work concerning the source mass reduction (by excavation) of near surface impacted soils in the OSA was submitted to the USEPA and IEPA in April. This source mass reduction activity is anticipated to take place in the Spring/Summer of 2005 based on agency approval.

Access to potential source materials beneath the Hamilton Sundstrand facility building will require the use of horizontal drilling. As mentioned previously, off-site access will be required for implementation of this technique. Access to off-site properties presents a potential to affect the schedule for implementation. Hamilton Sundstrand is working on logistical issues associated with this drilling technology and will continue to work with the USEPA on keeping the RD efforts for Area 9/10 moving forward in a timely and reasonable fashion.

REALIZED/ANTICIPATED PROBLEM CONDITIONS:
None.

PERSONNEL CHANGES:
None.